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III. Compliance Record

A. Questions Raised by the US

1. Soviet Reporting of Dismantling of Excess ABM Test Launchers

During 1972 the USSR dismantled seven excess ABM launchers at the Sary Shagan ABM test range. In 1973, during SCC negotiations on dismantling procedures for excess ABM test launchers, the Soviets stated that all excess test launchers had been dismantled but did not identify the procedures used." On July 3, 1974, the SCC-agreed procedures for such dismantling entered into force.

At SCC-IV (September 1974), the USSR provided notification that it had dismantled seven excess test launchers in accordance with the agreed Procedures when, in fact, five of the launchers had not been dismantled in complete accordance with those Procedures. However, rapid re-activation of these few launchers would not be of strategic significance. The US concern was that such inaccurate reporting, if left unchallenged, could establish a bad precedent.

The issue was raised in SCC-VI as a case of inaccurate notification or reporting. The US stated that it expected that in the future care would be taken to ensure that notification as well as dismantling or destruction would be in strict accordance with the agreed procedures.

CURRENT STATUS:

The US statement was not intended to elicit a response and none has been made during four subsequent sessions of the SCC.

2. Concealment at Sary Shagan

Article XII of the ABM Treaty enjoins each Party "not to interfere with the national technical means of verification of the other Party" and "not to use deliberate concealment measures which impede verification by national technical means of compliance with the provisions of this Treaty. This [latter] obligation shall not require changes in current construction, assembly, conversion, or overhaul practices."

Much of the Soviet concealment and deception effort in this area of strategic weapons development and deployment was initiated prior to May 1972. During 1974 the extent of Soviet concealment activities increased substantially. While none of these activities constituted a violation of the ABM Treaty or the Interim Agreement, there was concern

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Between January and the end of April 1975, careful analysis of the information resulting from our monitoring of the USSR led us to conclude that there no longer appeared to be an expanding pattern on concealment activities. We closed the discussion of this subject for the time being and stated it appeared that both sides agreed that an expanding pattern of concealment activities would be inconsistent with the SALT agreements.

[REDACTED]

CURRENT STATUS:

The US has not reopened this issue during the last four SCC sessions.

3. Testing of Soviet Square Pair SAM Radar in an ABM Mode

Article VI of the ABM Treaty states: "To enhance assurance of the effectiveness of the limitations on ABM systems and their components provided by this Treaty, each Party undertakes: (a) not to give missiles, launchers, or radars, other than ABM interceptor missiles, ABM launchers, or ABM radars, capabilities to counter strategic ballistic missiles or their elements in flight trajectory, and not to test them in an ABM mode."

On April 7, 1972, the US made a unilateral statement in part as follows: "...we would consider a ... radar to be 'tested in an ABM mode' if, for example, ... a radar makes measurements on a cooperative target vehicle ... during the reentry portion of its trajectory or makes measurements in conjunction with the test of an ABM interceptor missile or an ABM radar at the same test range. Radars used for purposes such as range safety or instrumentation would be exempt from application of these criteria."

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By early 1975 the US was reasonably confident that an SA-5 radar was being used to track ballistic missiles during reentry and raised this issue in SCC-V on February 11, 1975 by stating that US national technical means had received indications that an SA-5 radar was being tested in an ABM mode, i.e., that it may have been tracking ballistic missiles during the reentry portion of their flight trajectory into the Soviet ABM test range. The Soviets responded that no Soviet air defense radar was being tested in an ABM mode, including tracking of strategic ballistic missiles during reentry. They also noted that the use of non-ABM radars for range safety or instrumentation was not limited by the ABM Treaty.

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[REDACTED] The US stated in SCC-VI in April 1975 that: the US assumed that both sides now agreed that such use of an operational air defense radar would be inconsistent with Article VI of the ABM Treaty; and, given the cessation of testing, the US was willing to consider the matter closed. The Soviets stated this issue had been settled.

Subsequently, on both the 10th and 21st of December 1976 at the Sary Shagan Missile Test Center, the Soviets launched a SAM against a [REDACTED] target drone about 15 minutes after an SS-4 MRBM impacted on the range after a flight from Kapustin Yar. On both days, SA-5 engagement radars, Square Pairs, were active about 5 minutes before reentry, and fifteen minutes after impact but we do not know if the radars tracked the SS-4 RV. This timing may be the result of the high volume of launch activity at Sary Shagan in December. However, some believe that the activity could represent an attempt to track ballistic missiles with Square Pair in an attempt to give the SA-5 system some ABM capability.

The subject of the use of air defense radars at test ranges was discussed at SCC-X and the sides agreed to the following JDT language: "When air defense components and ABM system components are colocated at a test range, the Parties, in order to preclude the possibility of ambiguous situations or misunderstandings, will refrain from concurrent testing of such air defense components and ABM system components at that range." This subject is expected to be continued at the next SCC meeting or in the ABM Treaty Review process.

CURRENT STATUS:

This issue has not been raised in the last four SCC sessions. The simultaneous testing of ABM and air defense radars was discussed in SCC-IX and X as part of the review. During the latest SCC session, the two sides reached agreement in the JDT on ABM Treaty questions to refrain from concurrent testing of AD and ABM system components at the same test

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range. The Soviets did not accept the US-proposed ban on using AD radars for making measurements on SBMs during reentry. They argue that AD radars may be used for this purpose in individual cases. Continued discussion of this issue in the JDT is on the agenda for the next session. It could be a part of the ABM Treaty Review process.

4. ABM Radar at Kamchatka

Article IV of the ABM Treaty states: "The limitation provided for in Article III shall not apply to ABM systems or their components used for development or testing, and located within current or additionally agreed test ranges ...". In 1975, a "FLAT TWIN" ABM radar was discovered at the Kamchatka impact area of the Soviet ICBM test range. Since the ABM Treaty (Article IV) exempts from the limitations of Article III only those ABM components used for development or testing at current or additionally agreed ranges, deployment of this radar could have constituted establishment of a new Soviet ABM test range.

Though the ABM radar on Kamchatka was not strategically significant, it was decided to raise the issue in order to set the record straight on whether Kamchatka is an ABM test range and to protect the principle that additional ABM test ranges require prior mutual agreement.

The US SCC Commissioner sent a letter on the issue to the Soviet SCC Commissioner on December 8, 1975. An ambiguous response was received on December 19, 1975. The issue was again raised at SCC-VIII to establish that Kamchatka is an ABM test range and that Sary Shagan and Kamchatka are, as of now, the only ABM test ranges in the USSR. The Soviets replied that a range with a radar instrumentation complex existed on Kamchatka on the date of signature of the ABM Treaty and that if it would help eliminate ambiguities, the USSR would be ready to consider the Kamchatka range to be "a current test range within the meaning of Article IV of the ABM Treaty."

Discussions of topics related to the ABM Treaty during SCC-IX and X included references to the Kamchatka radar but the US did not reopen the subject as a compliance issue during that session.

CURRENT STATUS:

The Kamchatka radar issue remains formally open for possible future discussion as a compliance issue in the SCC forum. However, the SCC-IX discussions of the definition of an ABM test range resulted in Soviet acknowledgement in essence that the Kamchatka area was a "current" ABM test range on May 26, 1972, and is a range at the present time.

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In SCC-X, the issue, while not raised specifically, was discussed in the process of defining what constitutes an ABM test range. The Soviets have not formally agreed to identify the Kamchatka area as an ABM test range in the JDT of the Agreed Statement on the ABM Treaty topics. They have, however, privately stated that they will do so contingent upon satisfactory resolution of the issue of the procedures for establishing new test ranges.

B. Questions Raised by Soviets

1. US Radar on Shemya Island

Article III of the ABM Treaty states:

"Each Party undertakes not to deploy ABM systems or their components except...within one ABM deployment area...centered on the Party's national capital...and within one deployment area...containing ICBM silo launchers...."

Article IV of the ABM Treaty states:

"The limitations provided for in Article III shall not apply to ABM systems or their components used for development or testing, and located within current or additionally agreed test ranges...."

Section II, paragraph 5 of the JDT Agreed Statement states:

"The provisions of paragraph 4 of Section II shall be applied taking into account the obligations in Article VI of the Treaty concerning the testing of missiles, launchers, or radars which are not ABM interceptor missiles, ABM launchers, or ABM radars except that the provisions concerning radars shall be applied, taking into account the provisions of Article VI of the Treaty regarding radars for early warning of strategic ballistic missile attack and the Agreed Statement of May 26, 1972, regarding phased-array radars used for the purposes of tracking objects in outer space or as national technical means of verification."

In 1973 the United States began construction of a new phased-array radar on Shemya Island, Alaska. Final development testing on the radar (known as Cobra Dane) began in mid-1976 and the radar is in the final phases of becoming operational. While it makes use of technological advances, attributable to our ABM program, it is not an ABM radar and will not be used in an ABM role. Its missions will be intelligence gathering, space tracking and early warning.

The Soviets alleged in SCC-VI that the US had a radar complex under construction, outside US ABM test ranges, which incorporated components tested and developed for ABM purposes. The US stated that the new radar incorporated no ABM components and that it would be used for national technical means of verification, tracking objects in space, and

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early warning. At the final meeting of SCC-VI the Soviet Commissioner reserved the right to continue discussion of this particular question.

CURRENT STATUS:

The Soviets did not reopen the question of the radar on Shemya Island as a compliance issue during SCC-VII, SCC-VIII, or SCC-IX. During SCC-IX, however, they did describe the radar as one of a type which has been "tested in an ABM mode" according to US definition in connection with the discussions of topics related to the ABM Treaty. They did not state that they consider it to be "of a type tested in an ABM mode." The subject was not raised formally in SCC-X.

2. Dismantling of PAR Radar at Malmstrom

A Perimeter Acquisition Radar (PAR) was in the early stages of construction at Malmstrom AFB when the ABM Treaty was signed on May 26, 1972, and work was immediately halted on the radar. Dismantling of the PAR building commenced on October 1, 1973, and was completed by May 1, 1974.

The dismantling actions included cutting off all metal reinforcing rods. Concrete columns integral to the structure were left protruding above the remains of the building.

On September 26, 1974, the US notified the Soviets that dismantling activities at the Malmstrom site were completed by May 1, 1974. On April 8, 1976, the Soviets alleged that dismantling activities with respect to Malmstrom had not been carried out in full accord with the SCC Procedures--in particular, "the reinforcing rods of the wall of the PAR building had not been cut off."

In view of the Soviet concern, the US again photographed the remains of the PAR building and provided copies of the photographs to the Soviets on April 22, 1976. They clearly indicated that the dismantling was in full conformity with the SCC Procedures and that the external protrusions above the remains of the PAR building are concrete columns.

At the final SCC-VIII plenary on May 5, 1976 the Soviets stated that they expected the US to take into account the considerations expressed regarding the extent of dismantling the Malmstrom PAR building, and that they might return to this subject.

CURRENT STATUS:

The Soviets did not reopen the issue during SCC-IX or SCC-X. However, they have not formally closed out the issue.

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C. Potential Issues

Article VI of the ABM Treaty states:

"To enhance assurance of the effectiveness of the limitations on ABM systems and their components provided by this Treaty, each Party undertakes: (b) not to deploy in the future radars for early warning of strategic ballistic missile attack except at locations along the periphery of its national territory and oriented outward."

Agreed Interpretation D states:

"The Parties agree not to deploy phased-array radars having a potential (the product of mean emitted power in watts and antenna area in square meters) exceeding three million, except as provided for in Articles III, IV and VI of the Treaty, or except for the purposes of tracking objects in outer space or for use as national technical means of verification."

In addition, on July 28, 1970, the US Delegation made the following statement:

"Since Hen House radars [Soviet ballistic missile early warning radars] can detect and track ballistic missile warheads at great distances, they have a significant ABM potential. Accordingly, the US would regard any increase in the defenses of such radars by surface-to-air missiles as inconsistent with an agreement."

1. Radars at Olenegorsk and Pechora

The Soviets now have two large phased-array radar installations [redacted] in the northern USSR. One is located next to the Hen House radar at Olenegorsk, and is oriented to detect US ICBMs/SLBMs launched into the western USSR. The second radar installation is located just northeast of Pechora at the northern end of the Ural Mountains, and is oriented to detect US ICBMs launched into central USSR.

There are only two likely roles for these radars--ballistic missile early warnings (BMEW) or ABM battle management.* The primary advantage of the Olenegorsk radar in a BMEW role would be to provide the Soviets with better trajectory prediction accuracies than the Hen House radar or to provide the capability to handle more targets. The Pechora radar in the BMEW role would extend early warning coverage to areas not now covered by the Hen House radars and probably would provide an improved target handling capability in addition to more refined prediction data.

* A battle management radar provides precision information to ABM engagement radars, sorts and assigns targets to ABM radar complexes and could provide them with data for point-in-space intercepts.

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While it is believed that both these new radars will improve Soviet ballistic missile early warning capabilities and coverage, and that they will be used in this role, large phased array radars such as these could also have a capability for ABM battle management.

If radars at these locations had a battle management role, they would not significantly improve the battle management support already provided the Moscow ABM system by existing radars. But assuming such a role, they could provide support for limited deployment of ABM defense in the Western and Central USSR. To support widespread ABM deployment in these areas, additional battle management radars would be required. Battle management radars could constitute the long lead time elements of an otherwise rapidly deployable ABM system.

Of secondary concern is the location of the Pechora radar about 380 kilometers inland. Acceptance of this location as being "along the periphery" could set an undesirable precedent; e.g., a radar deployed 400 kilometers inland on a line between Leningrad and Moscow would be over halfway to Moscow. Thus, 380 kilometers inland cannot be accepted as "along the periphery" in all cases.

While the intended use of the new radars is currently uncertain, our concern would be magnified if the Soviets continue to deploy such radars, especially in the areas duplicating current BMEN coverage, and at the same time pursue a vigorous ABM R&D program.

2. Square Pair Radars at R&D Radar Research Facility No. 3 at Sary Shagan

Article VI of the ABM Treaty prohibits giving non-ABM radars capabilities to counter strategic ballistic missiles or to test them in an ABM mode. Recently two Square Pair radars -- the fire control radar associated with the SA-5 SAM system -- at the R&D Radar Research Facility No. 3 at the Sary Shagan Missile Test Center. This facility has been considered ABM related previously because of its size, orientation, and location. If ABM related, the presence of Square Pair radars at this facility is of concern to the US as Article VI clearly prohibits giving non-ABM radars ABM capabilities or to test them in an ABM mode.

It is possible, however, that the facility is intended for air defense research and development. Both ABM and air defense systems are tested at Sary Shagan.

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Article IV of the ABM Treaty allows each side to have no more than fifteen ABM launchers at test ranges. The SCC-agreed Protocol governing the dismantlement and replacement of ABM launchers in paragraph 7 states:

"Through timely and appropriate procedures, the Parties shall notify each other of the number and type (above-ground or silo) of ABM launchers and of the number of ABM radars on which dismantling or destruction has been completed and is in process, and of the number of ABM launchers and ABM radars used for replacement."

The issue of concern is whether the Soviets are required to provide the US with notification of the dismantling and replacement of ABM launchers at test ranges. Thus far, the Soviets have not provided such notification in SCC-VIII, IX, or X. Paragraph 7 of the SCC Protocol appears to all inclusive and not just limited to deployed ABM launchers. This concern could be raised in either the SCC or during the ABM Treaty Review.

The deployment of the two new radars raises two issues for the US Government. One issue concerns the consistency of these deployments with the provisions of the ABM Treaty, and the other concerns the increased risk to US security posed by the deployment of these new, more capable radars.

In regard to the consistency of these deployments with the provisions of the ABM Treaty, both are oriented outward, located along the periphery and have not been tested in an ABM mode. Thus, these deployments appear to be consistent with the ABM Treaty restrictions on early warning radars. Care should be taken, however, to insure that the 380 kilometer criterion established by the Pechora site does not set a precedent.

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There are differences of view about the likelihood that the new radars [REDACTED] will have ABM battle management capabilities, and about the likelihood that the Soviets are building them for use in this role. Concern about possible use for battle management would increase if the Soviets started to construct more such radars in locations appropriate for ABM support, and if the Soviets pursued ABM research and development rigorously. [REDACTED]

D. Overall Assessment

1. Questions Raised by the US

a. Soviet Reporting of Dismantling of Excess ABM Test Launchers

As the Soviets seem to have accepted the US concern regarding accurate reporting, it does not appear to be necessary to raise this question during the ABM Treaty Review process.

b. Concealment at Sary Shagan

[REDACTED]

c. Testing of Soviet air defense radar (SA-5) in an ABM Mode

The specific practice raised in SCC-V in 1975 has not been repeated and the December 1976 SA-5 activity was indirectly discussed in SCC-IX and X under the general question of the use of any air defense radar at an ABM test range. As a result of these discussions the sides reached agreement ad referendum to the Commissioners regarding concurrent testing which treat the US concerns. It would be appropriate to hold further discussions and finalize this agreed statement either in SCC-XI (fall 1977) or during the ABM Treaty review.

d. ABM radar at Kamchatka

This question remains formally open, however, in SCC-IX and X, the US concerns on this matter were addressed in the discussion of what constitutes "an ABM test range" and "testing in an ABM mode." The "agreed statement" would be an appropriate agenda item for either SCC-XI or the ABM Treaty Review conference.

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2. Questions Raised by the Soviets

a. US radar Shemya Island

It is the US view that the radar on Shemya Island is not a compliance issue under any provision of the ABM Treaty.

Although described by the Soviets in SCC-X as one of a type which had been "tested in an ABM mode" in connection with the discussion of topics related to the ABM Treaty, the Soviets have not formally raised this subject since SCC-VI. As it is believed that this subject was raised by the Soviets in the first place as a counter to the US concern about the radar, "Square Pair" could be raised by the Soviets again as a tactic during the ABM Treaty Review.

b. Dismantling of PAR radar at Malmstrom

Although not raised by the Soviets since SCC-VII, the Soviets have not formally closed out this issue. As in the case of the US radar on Shemya, this issue was probably raised by the Soviets in response to our concern about accurate reporting on dismantling and destruction of test launchers at Sary Shagan. Depending on the nature and substance of US agenda items for the ABM Treaty Review, the Soviets could raise this issue again as a tactical ploy.

3. Potential Issues

a. Radars at Olenegorsk and Pechora

The new radars [REDACTED] at Olenegorsk and Pechora [REDACTED] and it is too early to tell with any degree of certainty what their mission and capabilities will be. If for BMEW purposes they appear to fill the criteria established by the ABM Treaty for such radars, i.e., located along the periphery, oriented outward and no significant increase in air defenses (US unilateral statement). A battle management role for these radars may be difficult to determine under the best of circumstances. In view of this, it is believed that it would be premature to raise this question at this time.

The secondary concern from the US viewpoint is the location of the Pechora radar (380 km inland). Although, from a logistical viewpoint, its location at Pechora is logical, the US would not want a precedent set that would legalize the 380 km for future such deployments. This concern could be raised either in SCC-XI or during the ABM Treaty Review. In either forum, the US concern should be set forth that, while the location at Pechora is not being questioned, future deployments will be monitored closely on a case-by-case basis for adherence to the criteria established by the ABM Treaty, i.e., along the periphery.

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b. Square Pair Radars at R&D Radar Research Facility No. 3 at Sary Shagan

It is the US view that giving non-ABM radars ABM capabilities or testing non-ABM radars in an ABM mode is prohibited by Article VI of the ABM Treaty. On the basis of the presently available evidence, however, it is not clear whether the role of R&D Radar Research Facility No. 3 is ABM, air defense or both. Until this question is resolved it would be premature to raise the US concern on this matter either in the SCC or during the ABM Treaty review.

c. Soviet Reporting of Dismantling of Additional Test Launchers at Sary Shagan and Construction of New Test Launchers

The Soviets have had three opportunities to report this activity in the SCC (Sessions VIII, IX and X) and have not chose to do so. Paragraph 7 of the SCC agreed ABM Protocol on dismantling and replacement appears to require such reporting, however, the US has not raised this in the SCC. If the US feels this lack of reporting by the Soviets is a matter of concern, it could be raised in the next SCC session (fall 1977) as US problems with Soviet reporting has been raised in that forum on a more or less routine basis.

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